







State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

*h2 p*

Well Operator's Report of Well Work

Farm Name: FRED W. ZINN, ET AL.

Operator Well No. : MARY F. JONES #4

LOCATION: Elevation: 973'

Quadrangle: SMITHBURG

District: WEST UNION  
Latitude: 14,900 Feet South of 39 Deg. 20 Min. 00 Sec.  
Longitude: 1,820 Feet West of 80 Deg. 42 Min. 30 Sec.

County: DODDRIDGE

Company: KEY OIL COMPANY  
22 GARTON PLAZA  
WESTON, WV 26452-0000

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD  
Permit Issued: 04/15/02  
Well Work Commenced: 09/22/02  
Well Work Completed: 09/25/02  
Verbal Plugging

Permission granted on: \_\_\_\_\_ Rig  
Rotary X Cable \_\_\_\_\_  
Total Depth ( feet ) 2920'  
Fresh water depths ( ft ) 111'  
Salt water depths ( ft ) None

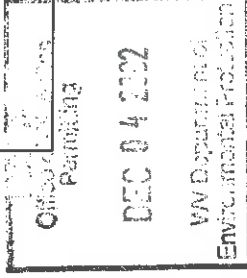
Is coal being mined in area ( Y / N ) ? N  
Coal Depths ( ft ) : NONE

OPEN FLOW DATA

Keener  
Big Injun  
Gordon

Producing formation Fifth Sand  
Gas: Initial open flow \_\_\_\_\_ MCF / d  
Final open flow 1,073 MCF / d  
Time of open flow between initial and final tests \_\_\_\_\_  
Static rock pressure 320 psig ( surface pressure ) after \_\_\_\_\_

Second producing formation Commingled  
Gas: Initial open flow \_\_\_\_\_ MCF / d  
Final open flow \_\_\_\_\_ MCF / d  
Time of open flow between initial and final tests \_\_\_\_\_  
Static rock pressure \_\_\_\_\_ psig ( surface pressure ) after \_\_\_\_\_



Pay zone depth ( ft )  
Oil: Initial open flow 0 Bbl / d  
Oil: Final open flow show Bbl / d  
Hours  
Hours

1783' - 1812'  
1838' - 1876'  
2408' - 2468'  
2729' - 2748'

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8 5/8"	953'	1953'	195 sks To Surface
4 1/2"	2825'	2825'	225 sks
2 3/8"		2690'	

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORMED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COALS ( IF ANY ) ENCOUNTERED BY THE WELLBORE.

For: KEY OIL COMPANY

By: *[Signature]*  
Date: November 25, 2002

PRESIDENT

D000 4677

Many F. Jones #4 (47-017 -4677)  
Three Stage Foam Frac – B.J. Services

1 <sup>st</sup> Stage:	Fifth Sand ( 14 holes ) ( 2738' to 2744' )	60 Quality Foam. 500 gal. 15% HCL. 30,000# 20/40 sand, 320,000 SCF N2, 385 blis foam.
2 <sup>nd</sup> Stage:	Gordon ( 14 holes ) ( 2442' to 2466' )	60 Quality Foam. 500 gal 15% HCL. 40,000# 20/40 sand, 425,000 SCF N2, 485 blis foam.
3 <sup>rd</sup> Stage:	Big Injun ( 12 holes ) ( 1838' to 1870' ) Keener ( 4 holes ) ( 1784' to 1787.5' )	60 Quality Foam. 750 gal 15% HCL. 40,000# 20/40 sand, 425,000 SCF N2, 485 blis foam.

WELL LOG

KB-GL	0	10	
Fill	10	14	
Sand	14	36	
Sand & Shale	36	284	
Red Rock	284	319	
Sand	319	340	
Shale & Sand	340	349	
Red Rock	349	363	
Sand & Shale	363	450	
Red Rock	450	470	
Sand & Shale	470	740	
Red Rock	740	770	
Sand & Shale	770	1660	
Little Lime	1660	1685	
Shale	1685	1686	
Blue Monday	1686	1701	
Big Lime	1701	1783	
Keener	1783	1812	
Shale & Lime	1812	1838	
Big Injun	1838	1876	
Sand & Shale	1876	2023	
Weir	2023	2114	
Sand & Shale	2114	2220	
Berea	2220	2245	
Sand & Shale	2245	2408	
Gordon	2408	2468	
Shale	2468	2729	
Fifth Sand	2729	2748	
Shale	2748	2920	
TD	2920		

1/2" water @ 111'

Gas Checks

1820' – Oil Odor  
1979' – Oil Odor  
2073' – Oil Odor  
2701' – Oil Odor  
TD – Oil Odor